SOME CRITICAL REMARKS ON MAN'S SCIENCE OF MAN

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I

THOUGH many sciences deal with man, there is no science of man. Man has been cut into pieces and distributed among different departments of research. The number of pieces increases as the quantity of our knowledge increases. Yet man goes on being one.

The many sciences apply different methods and conceptual schemes. They look at their different pieces under different aspects. Only a butcher who knows the animal can find the right joints. Hence the philosopher, as Plato demands, should be a good butcher. The butcher of man does not know man. Even if a perfect butcher could find the right joints, the pieces would not fit into one another, as divergent conceptual schemes took a hand in shaping the pieces. The scholars in charge of the pieces speak different languages, which the student of man cannot translate into one another. In despair he turns to philosophy for a universal grammar. But the professors of philosophy disagree on the alphabet.

Still man goes on being one.

Man, a compound of physical chemical events in the department of physiology, grows in the divinity school into a soul to be saved, and sinks in the department of psychology into a mechanism of stimuli and responses. The economist confronts his construct of pure theory with the reality of a changing economic life, and sees rational man upset the mechanism of the market by acting, even collectively, as a romantic fool. The anthropologist collects the material data of different cultures only to realize that the core of his problem is a "system of meanings." He tries to

classify and compare cultures. On what basis, if each culture is unique? The sociologist aims at the laws of social change. But his variables are at best the variables of a particular genus of society. They desert him as the society changes. He tries to classify in order to get at least at the variables of a class, but looks in vain for a principle of classification. Whatever age, country or culture the historian describes as unique, he will be suspected of describing it only in the light of his own age, which is equally unique. Yet he finds analogies between different ages and countries, and finally confesses that man, the eternally mutable being, is what he has always been and ever will be. But he does not say what man is and when at his best describes a particular time as an ephemeral manifestation of an eternal though unknown man.

The various sciences are eager to draw lines that demarcate areas in a system of sciences. These divides, however, merely divide professors. We learn that psychology deals with the individual qua individual, social psychology with the individual as a member of a group, sociology with groups. But it is as individual that man is a member of a group; as a member of a group that he is an individual. It is through individuals that groups behave. Yet areas of research must be differentiated. Certainly, if only the theories, the conceptual schemes developed in one area, did not forget that they must cover or be compatible with the phenomena of another area. The subject matter remains a unity. Conceptual schemes do not create the subject matter. They create aspects, a mirror, and the properties of the mirror share in shaping the image.

Biology, we learn, deals with nature; sociology with the social order. The one is supposed to stand still while the other moves. But biology and sociology speak different languages. Textbooks of sociology start with a description of human nature in terms of both biology and individual psychology, and proceed in another language to inquire into a social world that changes. But the laws of the social order are laws of nature. Biology does not

exhaust nature. One nature embraces the changing and the changeless.

Man is not an aggregate of data to be set down side by side. Mere distinctions do not help; we must state how the "realms," "areas," "levels" we distinguish are related to one another. Whenever we absolutize any set of concepts used for one of these realms we stabilize a doubtful distinction, succumb to a master of our own making, deprive ourselves of any possibility of inquiring into these relations, and must finally acquiesce in the split between man and nature, mind and body, physical and mental experience.

We would do better to treat all our dividing lines and specific sets of concepts, those of biochemistry included, as merely preliminary results of tentative points of view. The question remains: what is man? Not only the answers differ. The little word "is" contained in the question itself has many senses. Yet man "is."

Social scientists never weary of discussing methodology—a sign of weakness, not of strength. Were they sure of their results, they would not quarrel over methods. The model of the "scientific method" is borrowed from the natural sciences and lives on their prestige. Its formulation is largely defective. Not a few fancy they could share in this prestige simply by accepting as "scientific" only facts that are "verifiable" by anybody, and by demanding that these facts be ordered and correlated in constant relations between measurable quantities.

The results of this method as applied by the social sciences are meager. Facts are amassed far beyond possible use. Some are not even facts; others are of dubious relevance. Correlations of data do not establish laws of social change. The variables chosen for the sake of easy and reliable verification are not universal, their relations not constant. We have not yet a system of variables whose claim to articulate the social reality is uncontested.

Does not the spirit of science demand that the subject matter determine the method? Does not the preconceived method circumscribe our interest, mutilate our capacity to observe, distort

the subject matter? Maybe the social scientist would better heed his own counsel.

In the social sciences the facts are not given as isolated items. When isolated, these items are no longer the "facts." Moreover, granting that facts must be verifiable, demands for a specific verification are bound to lead to a preference for, or a selection of, a particular sort of facts. But these may not be the pertinent ones. We may prefer the clearly to the obscurely given; we cannot preassume that the clearly given explain or hold the key to the obscurely given. We may cherish the hope but should not deem the assumption scientific. Empiricists must be impartial. Science does not demand that we exclude facts; it demands that we refine and enlarge our capacity to observe.

It is obvious that in social life even such facts or items as can be isolated, observed and measured by instruments are what they are by virtue of their roles, functions, meanings in a dynamic context, the context of life. This is not only the first of all facts; it is the criterion of relevance: things are relevant with respect to it.

Our procedure of isolating items contains a great many hidden preassumptions. Many "facts" are not raw material, but the product of an initial, though unconscious, process of prefabrication. Though we must isolate, the social sciences cannot start with the product of isolation. Their facts are given in a living context.

The specific difficulties of the social scientist culminate in the demand for an "objective" description, on the one hand, and the necessity to recognize the relevance of "subjective" factors, on the other. In this apparent contradiction "subjective" and "objective" are used in different senses. The demand for an objective description is directed against the subjective bias or deficiency of the observer and holds for all science.

The subjective factors, whose relevance is recognized, belong to the thing observed, not to the observer. This thing, in the social sciences, is man. Man, a "subject," deals with objects. Objects have uses, functions, meanings for subjects. Subjects have

attitudes toward objects. If the sociologist distinguishes subjective from objective factors, he thinks of meanings, attitudes that belong to a subject matter in which the objective object cannot be separated from the subject whose object it is. Their "subjectivity" is the subject-character of the subject—the object to be observed—not the subjectivity of the observer. The ambiguous use of "subjective" and "objective" blurs two senses and feeds an endless confusion.

A scientist who, aiming at objectivity whatever the cost, excludes not merely his own subjectivity but also the subjective factors of his subject matter, deprives himself of the greater part of his facts, and his subject matter of its specific nature. He puts a ban on any kind of interpretation, restricts himself to registering "overt actions," and finally prefers the behavior of rats to that of the human soul, since the latter but not the former might suggest an interpretation that could be deemed subjective.

He may have good reasons and the best of excuses. The subjective factors, though they belong to the object observed, are phenomena for which verification and any check on the subjective bias or error of the observer are difficult. He can point to volumes of obvious misinterpretation, since the philosophers or other theorists of the human soul would rather press their theories into the phenomena than look at the phenomena and patiently read their tale.

However good such reasons and excuses may be, the awkward situation remains. Overt actions are what they "mean." Two objectively identical actions may mean, and thus be, two different things. All items of the material content of a culture may be reported "objectively"—the system of meanings remains the core of the problem.

Seemingly, the more reliable our observation, the less relevant our facts; the more relevant our facts, the less reliable our observation. What is *proteron pros hemas*—prior relatively to us—need not be *proteron physei*—prior by its nature.

While, guided by the practical problems the manipulation of

our own complex society poses, the science of society piles fact upon fact, inquires into trends, and establishes correlations, which, however useful, coordinate merely average values of ephemeral variables of our own society, social theory—aiming at a science of man—is not sure of the questions to ask, the concepts to apply, the language to use, the bearing of the answers it gets.

There is only one way: whether we are scientists or philosophers, we must refine and develop our capacity to observe, even if that takes us beyond the boundaries of easy verifiability by anybody. Unless we achieve an "objective" treatment of the "subjective" factors, we shall continue to move hither and yon between meaningless facts and doubtful meanings.

II

Science aims at a system of permanences. In a world of change these permanences are assumed to be constant relations between variables, which as "laws" govern the change. But is social life not indefinitely mutable?

When looking at social life as it unfolds around the globe and through the ages we see societies grow and decay, cultures follow one another, groups within groups wrestle with the world, change their gods, their ways of life and the interpretations of their existence, more or less slowly or quickly, yet without rest or respite, amid some knowledge and much ignorance, much misery and some happiness. An enormous pageant reaches from a forgotten past into an unknown future through a confused present.

It seems to be a strange kind of drama. There is no audience. The actors are its sole observers. No actor, however, stays through the play from beginning to end. Even any hero drops out after hardly more than half a scene. Most of us are poor actors, playing merely ourselves. There are no rehearsals, no script. We do not even know our lines, though we have only one or two to speak. We must be satisfied if the two lines we improvise seem to make sense to ourselves or to our nearest co-actors for some time, or are worth being remembered.

It may not be a play at all; before it is enacted it may lack the unity of a plot or a meaning as a whole. If there is a meaning the actors provide it during the play. This seems to be part of their acting. Nevertheless, man likes to pose as a divine observer outside the play. The philosopher of history pretends that every scene is what it is by virtue of its role in the play as a whole—the "meaning" of the whole to be interpreted by the philosopher of history. An insolent animal usurps God's throne. Such a philosophy of history, or any interpretation of the plot or meaning of the whole as expanded in space and time—even the philosopher's need for such an interpretation, his insistence that there must be such a meaning which justifies the parts—may be but a more or less ephemeral line in the play. The philosopher of history shapes his interpretation of the plot to fit the lines that he wants to say.

Yet there are "laws," invariants of history, a system of permanences. They are not, however, laws of any of the historical "worlds" that in time come to be and perish. They are rules that govern the acting of any possible actor in any possible play. They are to be searched for in the heart of the actor, and no interpretation of an historical cosmos can guide the search.

The philosopher of history will not find them in his imaginary meaning of the plot as a whole. Nor will a divine physicist find them in the mirror of his conceptual scheme. The physicist as observer would not even recognize himself in the description of himself as an object of his physics.

Each civilization, society, culture, builds up a "world," an order of a whole in which man lives. As the society changes, this world changes. We no longer live in our grandfathers' world. It seems to be our destiny as historical beings to move in a space that moves while we move. We try to escape this situation and stabilize our image of the world. The world should not move. We seek the system of permanences in the order of a stabilized cosmos. Yet this world changes, though we never intended it should. Again we try to escape and set up behind the changing

world the image of a wider world in which this change of our world is thought to occur. We do so of necessity: it is one of the rules that govern our acting.

Yet every such cosmic image, the wider as well as the narrower, is a product of time, shoved aside by time. So far as we interpret human existence in terms of such cosmic images, the changes of the world involve our interpretation of man.

The system of permanences is not to be found in any cosmic scheme. The permanences reside in the structure of the dynamic context in which these cosmic schemes come to be and perish. This context is not a whole of history extended in time. It is the context of life as life, in any possible world. Its laws are the rules that govern any actor in any possible play, as, in improvising his lines, he builds up an image of a world in which his lines make sense, and wrestles with the passions of his heart and the stubbornness of things.

There are countless variables. Any social or cultural change involves a multitude of transformations. These transformations pervade one another and interact in innumerable ways. Some are easy, others difficult, to verify. We cannot assume that their verifiability is a test of their relevance. The data that undergo transformation cannot be put side by side in a list of traits and properties. The variables belong to different groups and are of different orders. They have more or less bearing on the concrete life of the society we study. What is their order? Which are universal?

There is only one way to search for an answer. All life, be it the life of a hermit in the woods or of the chairman of the Middletown Women's Club, occurs as life in a dynamic context which, however general, has a definite structure. This dynamic context is omnipresent—implied in every fact, so far as it is a fact, of social life. Every question and every answer in a questionnaire presupposes it. The scheme of this context must contain in itself the principle of its differentiation, provide places for its variables, and thereby articulate its possible variations. If it does, it can

claim to constitute a theory. Without such a scheme, the science of man will never be a science.

III

Sociologists, psychologists, anthropologists speak of the pattern of a society, of a culture, of life in a rural, urban, suburban community or in a primitive tribe. The term "pattern" is assumed to mean a kind of order that constitutes the unity of a system. These patterns change. What is the pattern of all patterns within which these changes occur?

There is open or tacit agreement on one answer to this question. Man and environment, linked to each other in such terms as "adjustment," "maladjustment," "effective" or "ineffective" relationship, are thought to constitute a system of variables and to serve as the "pattern of all patterns."

In speaking of a good or bad adjustment, an effective or ineffective relationship, we assume that man's relation to his environment moves between good and bad, effective and ineffective; we even imply a kind of vector, tendencies toward a better adjustment or a greater effectiveness, forces within the system that tend to change the system in a certain way. However meager, this scheme is meant to be universal.

Yet little has been done to articulate and enrich the scheme. It may be that whenever a human being of any kind faces an environment much more is universal and given. But even the inarticulate scheme poses a great number of embarrassing questions.

Its variables are of two kinds. Man and environment are presumed to be indefinitely variable. The term "adjustment" suggests a variability between 0 and 1. Expressed as a formula: $M_n - {}^1_0\,R - E_n$. Different men can live in an equally effective relationship or an equally perfect adjustment to different environments, and thus be compared in terms of their adjustment. Actually this does not mean much, yet it implies a great deal. It contains a hint: the universal variables may be relations. Of

course, the different variables must be described independently of one another before we can trust any correlation we may be able to observe. But here we encounter another difficulty.

Since the correlations we are looking for presuppose an independent description of their relata, we treat man and his environment as different sets of items in the environment of the observer, to be identified by independent observations. This is, of course, perfectly legitimate and harmless whenever the observer and the human beings observed happen to live in the same environment. When we deal with an alien society and culture, the case is different. An anthropologist reports that the Andaman Islanders collect (empty) tin cans. He can be said to describe the life of the Andaman Islanders in terms of his own environment. But these are tin cans, "objectively"; they are manufactured in Philadelphia, as tin cans. Yes, but this kind of objectivity is irrelevant. They are what they are in the environment of the Andaman Islanders—rare, round, shiny objects—by virtue of the role they play in Andaman life. Thus the observer would do better to treat man and environment not as two separate sets of data but as the unity of a system whose inherent relations he should carefully respect.

"Environment" is obviously a relational term. An environment is someone's environment. Man is forever man in an environment. Both man and environment undergo change. Their changes change their relation to each other. This unity of a system can be said to be a dynamic context. It is full of tensions. So much everyone will be willing, or if not willing, can be compelled to grant.

I go a step further. The concrete reality of man and environment in relation to each other at any given moment is not merely what a man or his environment actually is or does here and now. It includes what a man or his environment can or could be or do, whether they actually are or do it. Our attitude toward other beings, human or not, depends both on what they actually are, here and now, and on what we think they could be and do. Thus

the "is" and "is not" have two senses, differentiated by the terms "actually" and "potentially."

In concrete life the reality of a being, human or not, includes its potentialities; they are part of the reality itself. I face an environment: I, as a being that is or does this, and can be or can do that, face an environment that is or does or yields this, but can or might be or do or yield that. Not only actualities but potentialities faced one another as the Pilgrim Fathers arrived in Plymouth Bay. The customary way of recognizing potentialities in the sciences dealing with man is to talk about "faculties," "capacities," "dispositions" of men or things.

Men differ from one another in their actualities and in the range of their potentialities. The same holds true for environments. Some environments have many answers for man's demands; others, such as the Arctic areas, have scarcely one. Man has no choice; getting a "No" to all except one question he may ask, he has to accept the one "Yes" and live an Eskimo's life.

Mere potentialities are not yet "tendencies" or "forces." Tendencies or forces presuppose potentialities. Man strives, desires, wants. He puts demands on his environment, meets desires and wants of other beings; the environment puts demands on him. Man and environment may or may not yield to their mutual demands. The man-environment system is full of tensions between different tendencies and forces. Their possible concords and discords are present in each other as possibilities of the system. Man, when miserable, is still a being that could be happy.

The pattern of all patterns implies tensions between "is," "can be," "tends to be," "should be." I use "should" here in the innocuous sense of a response to demands, without moral connotations. Man and his environment may or may not be what they could, tend to, or should, be. Sometimes they do not tend to be what they should be. We move forever to and fro between the possible concords and discords of "is," "can be," "wants to be," and "should be." Their tensions are our life.

The pattern of all patterns is a dynamic context: a "could"

and "should" inhere in the "is." "Facts" of an observer are what they are in their dynamic context. Isolation alters the "facts."

I return to the term environment. We have not yet faced the main difficulty. Environment must be someone's environment. A wood as such is not environment. It may be the environment of a hunter or a snake; it is not the same environment for the hunter as for the snake. Lots of things happen to the snake in his environment that do not and cannot happen to the hunter in his. Yet the environment is one and the same.

Psychologists distinguish between two meanings of the term "environment." The first is the geographical or physical; the second, the behavioral or functional. The difference seems obvious: the first is "absolute," the second, "relative."

The "absolute" environment could not be environment at all if it were no one's environment. And if it is someone's environment it is not absolute. The term can mean only that we regard the wood as the possible environment of an undefined multitude of possible beings. Only because there is such a thing that can become the environment of both a hunter and a snake can the hunter meet the snake.

The functional environment of the hunter does not become the functional environment of the snake. There is no common functional environment for the hunter and the snake. An I and You, able to talk with each other, can have a common functional environment—the functional environment of the group.

The geographer or the physicist pretends to describe the wood "objectively." By this he should mean merely that he describes it intersubjectively, without regard for any particular concrete observer but in relation to an anonymous observer whose data no possible observer can contest.

In the sciences dealing with man, environment means environment in relation to man. Here things are what they are in relation to man. Man, however, is concrete only as this or that man or group of men.

If an anthropologist describes the formation of an island in the

South Pacific, its plants, animals and the like, in terms of geography, botany, zoology, he does not describe the environment of the tribe, which is the subject matter of his studies. What he describes and calls the objective environment is the potential environment of any possible tribe.

From there the anthropologist proceeds to the functional environment of the tribe: the functions, uses, meanings, interpretations of the things in this geographical or physical environment. He describes or should describe the environment no longer relatively to the anonymous observer, but to the tribe itself. This is a different story. The functional environment can be both narrower and wider than the geographical or physical. An infinity of things that belong to the physical environment may be no part of the functional. Things that do not belong to the geographical or physical environment may play an important role in the functional environment: spirits in trees and rivers, and the souls of the dead. Though the functional and physical environment can be distinguished, they cannot be separated.

As man knows himself to be not man but this or that man, he does not conceive of an environment as being merely a functional environment; nor does he think of a functional environment as being merely his own. Any ego-centered psychology misses at its very outset the road to social life. We have only to look at what really happens. Though the human being may never be able to characterize or describe his environment except as functional environment, that is, in terms of uses, functions, meanings, direct or indirect, relatively to himself, he forever posits it and all the things in it as absolute, that is, as having a being of their own beyond any function or meaning to him. The environment is not a psychological or phenomenal "field" whose center the individual is assumed to be. Man may put himself into the center of a psychological field; he never is and need not think of himself as the center of his environment. The environment is and is thought to be both the actual and the potential environment of other beings.

Man, as this or that man, refers his functional environment not merely to himself. He refers it as well to other beings whose functional environment it is or could be or become. The hunter posits the wood as something that has a nature of its own, independent from him. Even before the snake he steps on chances to become an item of his functional environment, he thinks of the wood as the potential environment of other beings, known or unknown to him.

We should be very careful not to forget that the "functional" character of our environment implies two references: to ourselves, and to an "absolute" character by virtue of which our environment is the potential environment of other beings. Friends and foes are not merely items of their respective functional environments. They are beings who refer their functional environments to each other. Thus only can they be friends and foes.

Here the man-environment scheme comes up against its crucial test, and falters. It cannot serve as pattern of all patterns. It cannot articulate the social situation. Hence sociologists limit its usefulness to the personality research of an individual psychology. But the personality problems of individual psychology arise in social situations. The single ego is an abstraction.

IV

What is this generalized man of the man-environment scheme? We assume that "man" stands for every possible individual ego, whoever it may be. In this assumption we are wrong, though in thinking in terms of classes and members of classes we have the best conscience in being wrong.

No man is born with a capital M, but as this or that being, male or female, Chinese or American, of a mother to whom he was something ere he could be alone with himself. He is not born merely as a member of a class "man." Man with a capital M is not the generalized Ego. Every Ego is an I to a You within a We, and only as such can it be generalized and writ large. It could not harm even individual psychology never to forget that every

Ego, before being born, was an It; no one knew whether it would be a He or a She. It became first a He or a She, then a tentative Tu, and only as Tu an Ego. Indeed, it keeps on being a potential and actual Tu, He, or She, a member of a We, You, and They. Only as an Ego can it be all the others, and only as all the others can it be an Ego. Dying, it dies as an Ego and yet does whatever it can to outlive the Ego as a Tu, a He, or a She.

Individual psychology is a branch of social psychology by the nature of its subject matter. Though, in order of time, our social psychology developed as a branch of individual psychology, it still bears the imprint of its origin. In most of our talk about the "social field" the Ego still stands in the center of a psychological field. Like any other object in the field, the Alter Ego is referred to the Ego. This way of thinking, deeply ingrained in the habits of the psychologist, in the setting of his experiments, and in the questions he asks, seems to be, but is not, a matter of course. The child, though he refers the mother to himself, may perchance refer himself and some of his objects to the mother who enters his room. The social field is not the field of the Ego.

Thus we might do better to realize that the diverse entities in our environment are of two kinds: some are "objects" or things; others are "subjects" or living beings. In using these terms, however, we should remove the connotation they have in the theory of knowledge. Here the subject is the perceiver; the object, the perceived. Theory of knowledge asks: how does the subject come to perceive, to know, to think the object? There is only one subject, the perceiver; everything else, including the Alter Ego, is object. No one need, and psychology should not, yield to the pressure of a theory of knowledge that confronts a generalized subject with a generalized object of experience.

Some beings in our environment are subjects, though, to the theory of knowledge, they are merely objects, things perceived. What do or should we mean?

Subjects "live"; objects have no "life." We distinguish between organic and inorganic nature. These, however, are classifications

within the objective world of a scientific observer outside his world—or within an "absolute" or physical environment that is no one's environment and therefore no environment at all.

If we remain within the dynamic context of man's relation to his environment we find ourselves still using and needing the distinction, though in a different sense. What we distinguish are relations between a man and the beings of his environment. We treat one being as a subject, another being as an object. The distinction need not coincide with the distinction between living beings and dead things in an "objective" world or an "absolute" environment. We can treat living beings as if they were dead objects, and often do so. We can even treat, at least within certain limits and for a while, dead things as if they were living beings.

Here are a man and a stone. The stone is something to be thrown, to stumble over, to be used for a house. Whatever it may be, it is treated, described, characterized relatively to a living being. This living being may be ourself or our tribe or the lizard that hides under the stone, or the scientific observer or a fusion of all possible beings, to whom the stone could be whatever it may be. The stone is an object. Objects have a relative being. They are of use or of no use, good or bad, healthy or poisonous to somebody. They are what they are *pros allo ti,* with respect to something else, yet they are posited as having a nature of their own, and thus an absolute and not only a relative being, independent of what they are to any other being. This absoluteness concerns merely *that* they are—not our knowledge of *what* they are.

The stone needs another being who has the power to bestow on it a being relative to himself. This other being—by virtue of so strange a power—is a subject. A cow has the power to let grass be food. A lizard has the power to let a stone be a hiding place, in the functional environment of the lizard. The poor stone has no such power. It is an object. Subjects have a kind of being in themselves, *en heautois;* objects have a being only *pros allo ti.* The stone can be something to us; we can be nothing to the stone. This marks the difference.

Fortunately, a man's functional environment consists not merely of objects that can have only a being relatively to himself. He is not the sole being in his functional environment that has the power to bestow on things such a relative being. Some beings in his environment are subjects—living beings—some of them human and his kin; they, too, have the power to bestow on things, even on him, a being relative to themselves.

Here are a man and his dog. A man can be something to his dog, and care; he can be a master, friend, companion, foe. From his dog he receives at least a tiny part of what he is to himself. He even meets and recognizes in things the power of the dog to let things be something relative to itself. He may continue to refer the dog to himself. He begins to refer himself to the dog. This is the fundamental fact, from which social life starts, though it has escaped many a philosopher and the greater part of present-day psychology.

Man is bound to encounter the power of his fellowmen over things and himself. He may or may not acknowledge this power. He may even try, successfully or not, to treat another human being as an object, a tool, or slave. He may or may not learn that this or that other being resists being treated as an object. His slave may not compel him to listen to his demands. His children will, or his wife—and he need not even be compelled. He can enjoy discovering in himself a being relatively to others.

Referring the environment to himself, man refers himself to his environment. He returns the reference. "Environment" suggests a one-way reference. The double reference reveals the limitations of the term. To psychologists who start as a matter of course with the man-environment dichotomy, man with a capital M becomes an isolated ego that "responds" to the "stimuli" of an environment. But this environment contains subjects: beings in themselves, to which man is or can be something. The line between the ego and all other things is not the only demarcation line between man and his environment. There are many possible lines. The cave man may not draw the line between his ego and

the environment. His wife and children are not environment in the same sense as the stones and trees around his cave. He may draw the line between his family and the things around his cave. The I does not face merely the It. The I faces a You; the You is not an It. The I and You together face the It.

If we insisted on remaining within the man-environment scheme we would at least be compelled to go beyond the one-way sense in which we use it. It is not only that the environment is something in relation to man; man is what he is in relation to his environment as well as to himself. It is even true that what he is to his environment plays some role in whatever he is to himself.

By nature and of necessity man needs not only beings that he can treat as objects and refer to himself as food or shelter, as means of satisfying desires, or as instruments of procreation. He is in need of other beings—subjects—to which he can refer himself. The lonely man may even be inclined to treat an animal, a flower or a tree as subject, and "care" for it. He lets dead things take the place of the living beings he lacks and "objects" be "subjects." Man prefers man to animals and flowers. Man "responds."

In mutual response human beings bestow on one another a being relative to one another. What I am to You or to a We becomes part of what I am to myself. Even what the things are to You or to the group "in" which I live is part of what they are and can be to me.

V

Whenever we take pains to inquire into the meaning of this little word "in," a host of awkward questions come to the fore. The man-environment dichotomy seems to set up man against his environment. Man "faces" his environment. We may ask where this "facing" occurs, and answer, indignant at so silly a question, that it occurs in the "objective" world. Quite frequently, however, this objective world turns out to be the functional environment of the observer. It should be at least the environment of

the generalized observer of science, whom I call the anonymous observer. But the awkward question remains.

The Andaman Islander faces his tin cans neither in the functional environment of an American observer, to whom tin cans are defined by their use, nor in the "objective" world of an anonymous scientific observer, to whom tin cans are defined in terms of physics and chemistry, but in his own, the Andaman Islander's world, in which tin cans may have a kind of magic power. As the behavior of the Andaman Islander toward tin cans or other items of his environment depends upon the structure of the world "in" which he lives, we cannot disregard this world of his and treat the man and his environment as different and separate sets of items in the environment of a particular or a generalized observer. They constitute a system—together. This system is the legitimate subject matter of an observer, whose first obligation is to the nature of his subject matter. Things are what they are within this system. If we split them into two separate sets of items we destroy the relations in which the relata are what they are.

It may be doubted that this system of which man is a part should be called environment. The term is misleading. Man is not a part of his environment. He is well or badly adjusted, in an effective or ineffective relationship to it. We need a term that stresses not "against" but "in"—a small word, yet the most difficult in social theory.

Sociologists and psychologists recognize this need, and they resort to such terms as "atmosphere," "mental climate," "mental space," "life space"; or they borrow from physics the term "field." Each has some descriptive value. Following the lead of the word "in," we may say, using an ancient but now forgotten distinction, that man as subject is "in himself"—*en heauto*—though as a finite being among other beings he is in something else—*en allo*—which is not himself though it embraces him as a part. This all-embracing thing is the unity of an order as a whole. Whatever it may be or may be thought to be, it is unity of an order pervading

both man and all the things of his environment. It is not an aggregate, the sum total of all the things in the environment plus one—man. It is this unity of an order that we call "world"; man and his environment are in the same "world." The world in which they are is man's world.

But the term "world," used in many different senses in scientific, religious, metaphorical language, is hardly less ambiguous than "environment." Moreover, it suggests problems of a philosophical nature which the term environment conveniently hides. The scientist shuns philosophy; he readily scorns it, except the rather anaemic one he need not be aware of, which is implied in the preassumptions of his "scientific method." For shunning philosophical implications he pays an enormous price in the emptiness of such terms as "adjustment" or "effective relationship to the forces of the environment," or of such definitions of culture as "the sum total of man's conditioned responses to his environment."

The advantage of the term "world" is that it exposes the ambiguities "environment" hides.

Since the rise of Gestalt psychology, psychologists can be supposed to be familiar with the logical distinction between a whole and an aggregate. The aggregate is a "many," a multitude of elements. It can be complete: no element belonging to it is lacking. It can be incomplete: one or some elements are lacking. A complete aggregate is not yet a whole. The multitude of all existing elephants, though no elephant is lacking, is not a whole. Whenever "world" is thought of as *omnitude rerum,* the totality of all things (meaning completeness), it is thought of as an aggregate.

"Whole" means a unity. Unity does not mean uniformity. It can be a diversity. But the diversity is not a composite of elements that are prior to the unity. It is the unity of a structure. So far as the whole has parts, every part submits to and contains this structure. The whole, as the unity of a structure, not as completeness of all parts, is present in every part.

The distinction between whole and aggregate, though difficult, is necessary. Man's behavior toward whatever we call his environment cannot be understood as the sum of his behavior to the sum of the things that constitute the environment as an aggregate. Man behaves toward the whole in which he thinks he lives as well as toward single things. Man's relation to this whole and his conception of its structure permeates his relations to single things; it not only orders his actual but predetermines his potential experience.

There is always a preformed scheme—preliminary or hypothetical, explicit or implicit, having some structure, however faint—which provides a possible place for what an item is or can be, and guides its interpretation. Without such a scheme, no experience would be or could ever become experience. We do not simply meet and collect items; we locate and identify them, and say what they are by referring them to the unity of an order that encompasses both ourselves and our environment. Man facing the environment presupposes that man and environment are "in" the unity of a world.

The ambiguities of the term world correspond to the ambiguities of the term environment. As the environment of the man-environment scheme is the functional, not the geographical environment, so the world in which we think we live is our "subjective" world, not the objective world of a scientific observer outside the world. As our functional environment is not merely ours but includes the reference to a potential environment of other beings, so is our subjective world not merely subjective but referred to an objective world, which we posit as absolute but qualify relatively to us. Our world is not the world; the world is not ours. We call our valley, our village, our country "our world," though we know it is not the world. We may call the universe of the astronomer, the stars and spiral nebulae, the world, though it is not "our" world. It is not the world in which we live, care and act.

We say my world, his world, "the" world—meaning *le monde,*

fashionable society—the diplomatic world, the gothic or baroque world, Goethe's or Shakespeare's world, the Greek or the Christian world, or everyone's world, our common world, world as the universe of all possible worlds. In all cases we have in mind a kind of whole "in" which the being whose world it is constitutes a part.

This whole in which we live is both a *mundus hominum,* the "group," and a *mundus rerum,* the world of things interpreted by the group, the one referred to the other. According to an ancient definition of space, but by no means the worst one, space, embraced by us, embraces us. Whenever we feel something like that double embrace of an order "in" which we are, we call it our world, and may mean our Bostonian society, our Massachusetts Bay, or our intellectual climate, or all three together as a unity. We feel pretty well "adjusted" to our environment whenever we can say "our world" and mean all three together—though we may not say it unless certain conditions are fulfilled concerning our relations to single things and to other human beings, the ones with respect to the others, and both with respect to this "world." Such expressions as "perfect adjustment" or "effective relationship to the forces of the environment" can be said to constitute a universal answer, cautious enough to pass as "scientific," to the old philosophical question of the "happy life"—a legitimate question and an empty answer.

The few distinctions, introduced here in the course, and for the purpose of a critical analysis of the man-environment scheme, may be used to articulate "perfect adjustment" or "effective relationship" in terms of mere relations between the constituents of a universal pattern, and may thus give the legitimate question an answer still universal and not quite so empty.

VI

The few distinctions I propose may be found helpful in articulating the psychological content of some general concepts used in sociology, whose lack of precision is admitted and deplored: in-

tegration, disintegration, growth and decay. Their further development may finally help to give such famous questions as the reasons for the lower suicide rate of Catholic populations a more accurate and specific answer than Durkheim's greater "social cohesion" which supports man in the "anxieties"—the maid of all work in modern psychology—of which suicide rates are said to be functions. The proposed distinctions may be useful for liberating social psychology from the pressure of an ego-oriented individual psychology. A certain though still modest enrichment of the man-environment scheme may provide the inquirer with some principles of possible differentiations and some tools for ordering the variations.

A mere revision of the man-environment dichotomy is not the suggestion to which this study is intended to lead. Much more is needed than to replace that scheme by another, more elaborate one. The man-environment scheme, however enriched, can hardly lose its fundamental ambiguity. It interrelates items in the environment of the observer which, as given relata, antecede their relations. This study suggests that the "fundamental pattern" the sciences of man are in want of should be conceived of as a dynamic context, implied in every fact of human life, individual or social, of whatever age and society. That dynamic context should not interrelate already given facts, but should articulate the variable interrelation of possible roles or functions of possible facts. This suggestion goes far beyond any mere enrichment of the man-environment scheme. It sets a difficult task. It merely points in a direction; in this direction alone can we hope to find the way to the "universal variables."

Many a scientist will scorn a request to resort to what he calls arbitrary metaphysics or the empty void of philosophical speculation. He is requested to do nothing of the sort, even if along this way he should stumble upon some of the oldest and most stubborn problems of philosophy proper.

His task presupposes that he distrusts not merely any philosophy not his own, but his own as well, however conveniently hidden.

It may demand that he refrain from absolutizing, as the reality of nature herself, the picture of human nature reflected in the conceptual mirror of biology and physiology. He is not required to shove the picture aside; he must accept the fact that in this particular conceptual mirror, in this particular light, his subject matter shows this particular order—an astonishing fact, to be wondered at no end. He must remain aware that, whatever order he himself assumes or discovers in his own mirror, this astonishing fact remains to be accounted for, as an aspect of the same yet unknown order in another conceptual mirror. But such acceptance does not compel him to submit to physiology and to "explain" emotions in terms of chemistry as a disturbance of glandular equilibrium.

The search for such a dynamic context may demand further that he resist the temptation to restrict his subject matter, under the excuse of a heuristic principle, to a certain type of order he would like to find. The scientific spirit by no means requires that the hidden nature of the subject matter correspond to a specific order which our practical interest in reliable predictions or in certain procedures of organized research would prefer.

This does not mean that the scientist should turn from observation to philosophical speculation. He may go on distrusting a philosophy in which he sees nothing but a body of traditional quarrels, perpetuated in changing terminologies by the professors of philosophy. It means only that he should patiently observe the phenomena as they are given in concrete life, and know what he does when he presses them into a mill in which, minced to facts, severed from their context, sifted according to verifiability, cumulated and correlated, they can no longer either tell the story of man's happy and miserable life or lead to laws of social change that social change cannot change.

Any such conceptual scheme of a "universal pattern" is not to be deduced from a preconceived metaphysical system and imposed upon the interpretation of the phenomena. It can only be an hypothesis and, like any hypothesis, a point of departure. It

is to be corrected and refined, confirmed or rejected with respect to the power it may have or lack to order the diversity and to spell the concreteness of life. An analysis of the phenomenon in its living context, guided by the hunger for concreteness, and going many times to and fro from the most general to the most particular, may have some chance to order the variables in tentative groups of transformation, and finally to arrive, in many experiments of both thought and observation, at a working hypothesis of a system of universal variables that can outlive the change of material data, social institutions, and even of those cosmic images in which restless man interprets and reinterprets his own existence.